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**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Guy H. Eriksen (reg.41,736).

3. The applicant has been amended as follow:

1. (currently amended) A method for supporting multiple diagnostic sessions in a bi-directional communication device, said method comprising:

- receiving diagnostic session requests from a plurality of requesters;
- verifying identification information for each of said requesters;
- establishing a communications channel for each verified requester; and
- communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications ~~channels~~. channels.

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wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

2. (previously presented) The method of claim 1, further comprising:  
if communication of information to a requester fails, making available, to a subsequent requester, the communications channel associated with the failed communication.
3. (original) The method of claim 1, wherein said identification information comprises a user ID and a password.
4. (original) The method of claim 1, wherein said establishing a communications channel comprises assigning an available socket for communication with each verified requester.
5. (original) The method of claim 4, further comprising rejecting subsequent requests after a total number of available sockets has been assigned.
6. (canceled)
7. (canceled)

8. (currently amended) An apparatus for supporting multiple diagnostic sessions in a bi-directional communication device, said apparatus comprising:

a server;

a memory for storing program instructions; and

a processor for executing said instructions to configure the apparatus to perform the steps of:

receiving diagnostic session requests from a plurality of requesters;

verifying identification information for each of said requesters;

establishing a communications channel for each verified requester; and

communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications ~~channels~~. channels,  
wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

9. (previously presented) The apparatus of claim 8, further configured to perform the step of:

if communication of information to a requester fails, making available, to a subsequent requester, the communications channel associated with the failed communication.

10. (previously presented) The apparatus of claim 8, further configured to perform the steps of:

rejecting subsequent requests after a total number of available sockets has been assigned.

11. (previously presented) The apparatus of claim 8, wherein said establishing a communications channel comprises assigning an available socket for communication with each verified requester.

12. (previously presented) The apparatus of claim 11, wherein said assigned sockets comprise a requester IP address and a requester receiving port number.

13. (previously presented) The apparatus of claim 8, wherein said plurality of requesters comprise Telnet clients.

14. (previously presented) The apparatus of claim 8, wherein said plurality of requesters are network devices.

15. (previously presented) The apparatus of claim 8, wherein said server comprises:  
a web server for enabling communication between a requesting device and a diagnostic engine; and

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said diagnostic engine for performing the routines that are specified in each of said requests.

16. (previously presented) The apparatus of claim 8, wherein said apparatus comprises a modem.

17. (currently amended) An apparatus for supporting multiple Telnet sessions, comprising:

means for receiving Telnet session requests from a plurality of requesters;

means for verifying identification information for each of said requesters;

means for establishing a communications channel for each verified requester; and

means for communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications ~~channels~~; channels,

wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

18. (currently amended) Computer-readable medium for storing a set of instructions, wherein when said set of instructions is executed by a processor perform a method comprising:

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receiving Telnet session requests from a plurality of requesters;  
verifying identification information for each of said requesters;  
establishing a communications channel for each verified requester; and  
communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications ~~channels~~. channels,

wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

19. (currently amended) A network comprising:

at least one subscriber terminal comprising a Telnet client for initiating Telnet session requests;

at least one data servicing system comprising a Telnet client for initiating Telnet session requests; and

a network device comprising:

a Telnet server;

a memory for storing program instructions; and

a processor for executing said instructions to configure said network device to

perform the steps of:

receiving Telnet session requests from said at least one subscriber terminal and said at least one data servicing system;  
verifying identification information for each of said requesters;  
establishing a communications channel for each verified requester; and  
communicating diagnostic information corresponding to a particular one of the diagnostic session requests received from a particular one of said verified requesters to all of said verified requesters via said established communications ~~channels:~~ channels,

wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters, and

wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

20. (previously presented) The network of claim 19, wherein said network device is further configured to perform the step of:

if communication of information to a requester fails, making available, to a subsequent requester, the communications channel associated with the failed communication.

4. The following is an examiner's statement of reasons for allowance:

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With respect to claims 1-5, and 8-20, the prior art of record, individually or in combination, fails to teach, suggest or render obvious the claimed invention in combination with Applicants' arguments.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272- 3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ***William Vaughn*** can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from



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a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thanh Tammy Nguyen/

Primary Examiner, Art Unit 2144